

19.10.2004 19 OCT. 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089775 A1(51) International Patent Classification⁷: F02M 25/028,
B05B 1/14

(21) International Application Number: PCT/FI03/00301

(22) International Filing Date: 16 April 2003 (16.04.2003)

(25) Filing Language: English

(26) Publication Language: English

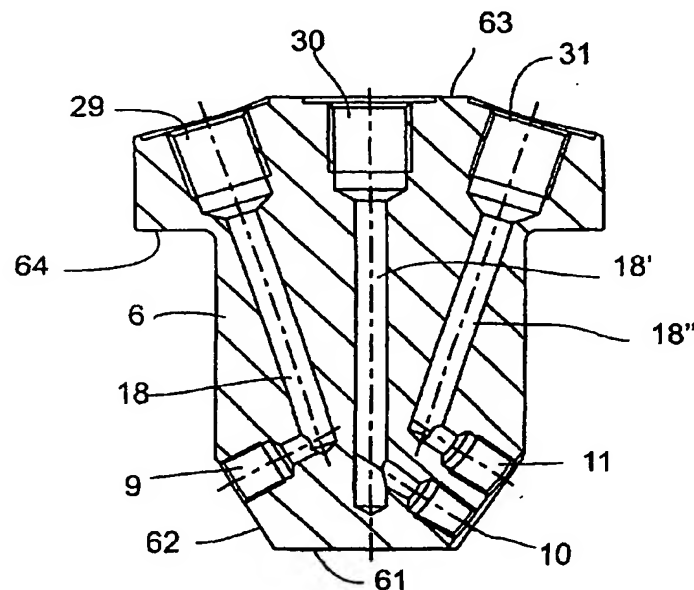
(30) Priority Data:
20020752 19 April 2002 (19.04.2002) FI(71) Applicant (for all designated States except US): MAR-
IOFF CORPORATION OY [FI/FI]; P.O.BOX 25,
Hakamäenkuja 4, FIN-01511 Vantaa (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MAHLANEN,
Timo [FI/FI]; Prikite 2 A, FIN-00850 Helsinki (FI).
RÖNNBERG, Jan [FI/FI]; Brontie 2 as 20, FIN-02400
Kirkkonummi (FI). HONKANEN, Aimo [FI/FI]; Peller-
vontie 22, FIN-01420 Vantaa (FI). SUNDHOLM, Göran
[FI/FI]; Ilmari Kiannon kuja 3, FIN-04310 Tuusula(FI). METZGER, Harry [FI/FI]; Aleksis Kiven tie 49,
FIN-04200 Kerava (FI). TUOMISAARI, Maarit [FI/FI];
Kluuvintie 11 A, FIN-02180 Espoo (FI).(74) Agent: HEINÄNEN OY; Annankatu 31-33 C, FIN-00100
Helsinki (FI).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SPRAYING HEAD



(57) Abstract: A spraying head for the humidification of intake air, especially the intake air of a piston engine, said spraying head comprising a body and a channel for supplying a spraying medium from an inlet to at least one nozzle. The spraying head (6) is provided with at least two channels (18, 18', 18''), each forming a separate passage to at least one nozzle (9, 10, 11).

WO 03/089775 A1